March 6, 1988

Dear

This letter is in regards to the applicability of the State of Idaho's Water Quality Guidelines, Section 1-2400.03 Mixing Zone, as they pertain to the EPA's NPDES Permit No. ID-002540-2 for Cyprus Thompson Creek. The Department has evaluated eight years of biological, chemical and physical data for both the non-toxic effluent and receiving water and has determined that the above section of the guidelines are not applicable when used in conjunction with the conservative EPA Quality Criteria for Water.

In reaching this conclusion, upon evaluating Section 1-2400.02 exceptions to treatment requirement the Department has determined that the use of only 25% of the receiving water volume in the mixing zone need not apply after conducting a physical, chemical and biological appraisal of the receiving water. The consentrations of toxic materials within the mixing zone are well below the 96 hour LC 50 for biota significant to the receiving water. In addition, it was determined that the effluent as defined in Section 1-2003.19 (Hazardous Material Definition) and 1-2200.01 (General Water Quality Standards-Hazardous Materials) is exempt from Section 1-2400.03 because the effluent does not meet the definition of hazardous material.

Also the effluent does not exceed the EPA Quality Criteria for water within the mixing zone. In addition, the receiving water's existing water quality is not in violation of the Acute/Chronic Criteria. It has been demonstrated by eight years of water quality data that the existing water quality and existing uses are adequately protected and further treatment would be unreasonable and economically prohibitive (Section 1-2400.02 b). Beneficial uses of the receiving water's are maintained and no substantial hazard to human health occurs within the mixing zone.

The Department concurs with Cyprus Thompson Creek that if the EPA uses the conservative and constrictive chronic values in deriving the NPDES effluent guidelines then the mixing zone in Thompson Creek may include 100% of the volume of stream flow.

Sincerely,